# PM Conformity Hot Spot Analysis Project Summary Form for Interagency Consultation

The purpose of this form is to provide sufficient information to allow the Transportation Conformity Working Group (TCWG) to determine if a project requires a project-level PM hot spot analysis pursuant to Federal Conformity Regulations.

The form is <u>not</u> required under the following circumstances:

- 1. The project sponsor determines that a project-level PM hot spot analysis is required or otherwise elects to perform the analysis; or
- 2. The project does not require a project-level PM hot spot analysis since it:
  - a. Is exempt pursuant to 40 CFR 93.126; or
  - b. Is a traffic signal synchronization project under 40 CFR 93.128; or
  - c. Uses no Federal funds AND requires no Federal approval; or
  - d. Is located in a Federal PM attainment area (note: PM10 and PM2.5 areas differ).

Projects other than those listed above may or may not need a project-level PM hot spot analysis depending on whether it is considered a "Project of Air Quality Concern" (POAQC), and should be brought before the TCWG for a determination.

It is the responsibility of the project sponsor to ensure that the form is filled out completely and provides a sufficient level of detail for the TCWG to make an informed decision on whether or not a project requires a project-level PM hot spot analysis. For example, the TCWG will be reviewing the effects of the project, and thus part of the required information includes build/no build traffic data. It is also the responsibility of the project sponsor to ensure a representative is available to discuss the project at the TCWG meeting if necessary.

#### Instructions:

- 1) Fill out form in its entirety. Enter information in gray input fields.
- 2) Be sure to include RTIP ID#. See http://scag.ca.gov/rtip/ if necessary.
- 3) Submit completed form to your local Transportation Commission who will submit it to the MPO. Caltrans projects can be submitted by Caltrans District representative.

The TCWG meets the fourth Tuesday of each month at SCAG Headquarters, 818 W. 7<sup>th</sup> Street, 12<sup>th</sup> Floor, Los Angeles, CA 90017. Participation is also available via teleconference. Call (213) 236-1800 prior to meeting to get the call-in number and pass-code.

Forms must be submitted by the second Tuesday of the month to be considered at that month's TCWG meeting.

July 30, 2006

#### **REFERENCE**

# Criteria for Projects of Air Quality Concern (40 CFR 93.123(b)(1)) – $PM_{10}$ and $PM_{2.5}$ Hot Spots

- (i) New or expanded highway projects that have a significant number of or significant increase in diesel vehicles:
- (ii) Projects affecting intersections that are at Level-of-Service D, E, or F with a significant number of diesel vehicles, or those that will change to Level-of-Service D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project;
- (iii) New bus and rail terminals and transfer points than have a significant number of diesel vehicles congregating at a single location;
- (iv) Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location; and
- (v) Projects in or affecting locations, areas, or categories of sites which are identified in the PM10 or PM2.5 applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

#### Links to more information:

http://www.fhwa.dot.gov/environment/conform.htm

http://www.epa.gov/otaq/stateresources/transconf/index.htm

# TABLE 1 Type of Project

- New state highway
- Change to existing state highway
- New regionally significant street
- Change to existing regionally significant street
- New interchange
- Reconfigure existing interchange
- Intersection channelization
- Intersection signalization
- Roadway realignment
- Bus, rail, or inter-modal facility/terminal/transfer point
- Truck weight/inspection station
- At or affects location identified in the SIP as a site of actual or possible violation of NAAQS

ii July 30, 2006

#### RTIP ID# (required) ORA000195

#### Project Description (clearly describe project)

The Orange County Transportation Authority (OCTA) is proposing design modifications to the SR-22/West Orange County Connection (WOCC) Project at the eastern terminus of the project in the westbound direction to extend the HOV lane 750 meters (2,460 feet) further east and eliminate the auxiliary lane at the Tustin Avenue on-ramp and re-stripe the westbound Tustin Ave on-ramp to a standard ramp-merge configuration in the City of Orange, Orange County, California. The re-striping modifications to this location differ from the design that was evaluated in the approved Final Environmental Impact Statement/Report (FEIS/EIR). A description of the original project, which was evaluated in the FEIS/EIR (March 2003) and design plans, along with the proposed modifications evaluated in this Environmental Re-evaluation/Addendum are provided in this document. The restriping modifications to the project would not result in any additional permanent right-of-way acquisitions. The appropriate transportation agencies (i.e., Federal Highway Administration and Caltrans) have been involved with the proposed changes.

#### Type of Project (use Table 1 on instruction sheet)

Change to existing state highway – construct one HOV lane in each direction.

County	Narrative Location/Route & Postmiles SR-22 between I-405 and SR-55							
Orange	12-ORA-22 KP/(PM) 1.1/21.2 (0.7/13.2)							
Caltrans Projects – EA# 071611								
Lead Agency: Caltrans and OCTA								
Contact Person		Phone#		Fax#		Email		
Mary Toutounchi		(714) 712-1640		(714) 712-1582		MToutounchi@octa.net		
Hot Spot Pollutant of Concern (check one or both) PM2.5 X PM10 X								
Federal Action for which Project-Level PM Conformity is Needed (Check appropriate box)								
Categorical Exclusion		EA or Draft EIS		ONSI or inal EIS	x	_	S&E or onstruction	Other

Scheduled Date of Federal Action: October, 2006

#### Current Programming Dates as appropriate

(NEPA)

	PE/Environmental	PE/Environmental ENG ROW		CON
Start	Prior RTIP	Prior RTIP	Prior RTIP	Prior RTIP
End	Complete	05-06	Prior RTIP	05/06

#### Project Purpose and Need (Summary): (attach additional sheets as necessary)

The purpose of the design modification is to improve safety and traffic operations at the eastern terminus of SR-22 in the westbound direction, and were a result of a design safety review for operations and sight distance requirements.

The purpose of the SR-22/WOCC project is to improve both existing and future mobility and enhance safety throughout the corridor. SR-22 represents a major link to other freeway systems within the Orange County area and is an important component of the county's transportation system.

Under existing conditions, SR-22 does not meet the capacity needs of the area. With projected population and employment growth trends indicating increased transportation volumes, SR-22 can be expected to experience worsening operational deficiencies. There is insufficient capacity within the SR-22 corridor on the freeway and adjacent arterial streets to accommodate existing and projected travel demand between the SR-55 interchange and the Los Angeles County line at I-405 and I-605.

Some portions of existing SR-22 do not conform to current state and federal highway design standards. Existing shoulder widths and vertical clearances, for example, are non-standard in some areas. Providing standard features where possible will improve safety on the freeway mainline and ramps.

#### **Surrounding Land Use/Traffic Generators** (especially effect on diesel traffic)

Discussion of land uses/traffic generators will be focused on the City of Orange since the changes are all of the proposed changes are within their jurisdiction.

Since the early 1980s, mid-rise and high-rise office buildings and business parks in the City of Orange have been built on land formerly occupied by small-scale, low-intensity offices, shopping centers, and industrial developments. Dense subdivisions, condominiums, and apartment complexes have replaced the traditional medium-sized lot, single-family residential tract.

The primary land use in Orange along SR-22 is commercial, with some retail uses near the east end of SR-22. A transition is made from major retail to commercial high-rises near Main Street. Further east along SR-22, Old Town commercial and mixed-retail are the predominant land uses. Saint Joseph Hospital and the Children's Hospital of Orange County are large public facilities located north of SR-22 nestled between several high-rise buildings. East of Glassell Street to Tustin Avenue, the predominant land use is low-density residential. At Tustin Avenue, the land use changes to commercial as far east as SR-55, where there is low-density residential.

According to the planning department of the City of Orange there are no proposed land use changes in the affected area. There are, however, several proposed development plans currently under consideration by the City, which are associated with The Block at Orange and the surrounding area.

Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

SR-22/WOCC Project Opening Year 2007

		<i>i</i> 0			
Condition	Location	AADT <sup>1</sup>	LOS <sup>2</sup>	% Trucks³	Truck AADT
Build	Beach Blvd - Knott St	168,700	Е	4.9%	8,270
	Harbor Blvd - Euclid St	226,600	E	4.7%	10,650
	I-5/SR-57 - The City Dr	242,200	Е	4.5%	10,900
	Main St - I-5/SR-57	179,500	Е	4.5%	8,080
	Tustin St - Glassell St	158,700	Е	3.4%	5,400
No Build	Beach Blvd - Knott St	153,300	Е	4.9%	7,510
	Harbor Blvd - Euclid St	200,300	F	4.7%	9,410
	I-5/SR-57 - The City Dr	219,100	F	4.5%	9,860
	Main St - I-5/SR-57	183,900	Е	4.5%	8,280
	Tustin St - Glassell St	167,900	Е	3.4%	5,710

Interpolated from existing (1996) and 2020 No Build in the FEIS/EIR Table 3.7-3 and 2020 Build in Project Report Attachment F

RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

SR-22/WOCC Project Design Year 2020

Condition	Location	AADT <sup>1</sup>	LOS <sup>2</sup>	% Trucks <sup>3</sup>	Truck AADT
Build	Beach Blvd - Knott St	177,600	F	4.9%	8,700
Bana	Harbor Blvd - Euclid St	238,100	E	4.7%	11,190
	I-5/SR-57 - The City Dr	251,700	E	4.5%	11,330
	Main St - I-5/SR-57	184,900	Е	4.5%	8,320
	Tustin St - Glassell St	162,000	E	3.4%	5,510
No Build	Beach Blvd - Knott St	158,100	Е	4.9%	7,750
	Harbor Blvd - Euclid St	204,800	F	4.7%	9,630
	I-5/SR-57 - The City Dr	222,600	F	4.5%	10,020
	Main St - I-5/SR-57	190,500	F	4.5%	8,570
	Tustin St - Glassell St	173,600	Е	3.4%	5,900

<sup>1. 2020</sup> No Build from the FEIS/EIR Table 3.7-3 and 2020 Build from Project Report Attachment F

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

Not Applicable

RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

Not Applicable

Peak hour worse direction based on interpolated volumes and v/c conversion to LOS based on FEIS/EIR Table 3.7-4

<sup>3.</sup> Caltrans 2004 truck counts

<sup>2.</sup> Peak hour worse direction from FEIS/EIR Table 4.7-6

<sup>3.</sup> Caltrans 2004 truck counts

### Describe potential traffic redistribution effects of congestion relief (impact on other facilities)

The proposed restriping modifications are exclusively on the SR-22 freeway. There would be no potential for traffic redistribution effects of congestion relief because it has been determined that the proposed restriping modifications would improve traffic operations and the elimination of one auxiliary lane is warranted by the lack of traffic demand. Please refer to the discussion in the comment/explanation section for detailed analysis.

#### Comments/Explanation/Details (attach additional sheets as necessary)

The construction of the mainline HOV on SR-22 is underway and it is anticipated to be complete in early 2007. Caltrans and OCTA, the Agency responsible for implementation of the SR-22/WOCC project, will obtain FHWA concurrence on the Environmental Reevaluation for the restriping modifications as described below. This *PM Conformity Hot Spot Analysis Project Summary Form for the Interagency Consultation* solicits the concurrence of the Transportation Conformity Workgroup to determine that the proposed restriping modifications described below are <u>not</u> considered "Project of Air Quality Concern (POAQC)."

### Restriping of the HOV lane at the eastern terminus of the SR-22/WOCC Project in the westbound direction and elimination of an auxiliary lane

#### Existing Conditions & Original Project Proposal

The existing westbound SR-22 freeway lane configuration beginning at approximately Tustin Ave overcrossing consist of one auxiliary lane from the westbound Tustin Ave on-ramp to the westbound Glassell/Grand off-ramp, and this segment currently consist of three mixed flow lanes. As the auxiliary lane terminates at the Glassell/Grand off-ramp, the three mixed flow lanes continue on the SR-22 mainline above the Glassell/Grand overcrossing.

The original project proposal for the SR-22/WOCC Project retained the auxiliary lane from the westbound Tustin Ave on-ramp to the westbound Glassell/Grand off-ramp, and it proposed to widen the three mixed flow lanes to four mixed flow lanes. The four mixed flow lanes would continue on the SR-22 mainline beyond the gore of the Glassell/Grand off-ramp (approximately mainline Station 203+00). At Station 203+00, one mixed flow lane (lane #4) was dropped and the HOV lane began (See Attached Original Project Layout Plans L38-41)

#### **Proposed Design Modifications**

As described above, the original project proposal would drop the fourth lane at approximately mainline Station 203+00 (See Original Project Layout Plans L38), and begin the HOV lane. After review by the Safety Review Committee, it was recommended the change in lane configuration be shifted (start the HOV lane to the east of this location) to eliminate potential safety-related incidents due to the geometrics and non-standard sight distance issues at this location.

After review of traffic volumes from the EIS/EIR, the auxiliary lane from the westbound Tustin Ave on-ramp to westbound Glassell/Grand off-ramp was determined not to be warranted. The combined traffic volumes from both the Tustin Ave on-ramp and the SR-55 freeway connectors to westbound SR-22 freeway are approximately 5,000+ with only 400+ vehicles exiting at the Glassell/Grand off-ramp.

Therefore, a proposal of the following restriping modifications are recommended:

- 1. Eliminate the auxiliary lane between Tustin Ave and Glassell/Grand on-and-off ramps and restripe the Westbound Tustin Ave on-ramp to a standard ramp-merge configuration and shift the four mixed flow lanes to the right in the westerly direction of the freeway.
- 2. Based on design standards for the ingress to an HOV lane, begin the HOV lane at approximately mainline Station 210+00 (See Attached Pavement Delineation Plans PD70-75). At this station there are still four mixed flow lanes and one HOV lane.
- 3. At mainline Station 208+00 (See Attached Pavement Delineation Plans PD70-75), the #4 lane becomes a dedicated off-ramp lane to Glassell/Grand and the #3 lane is an optional off-ramp lane. This results in three mixed flow lanes and one HOV lane continuing on the mainline over the Glassell/Grand OC, the same as the original proposal.

The following are conclusion of the proposed restriping modifications to the SR-22/WOCC Project at the eastern terminus:

- 1. There would be no change in the level of service or capacity enhancement from the approved EIS/EIR.
- 2. The HOV lane is proposed to be extended by approximately 750 m to the east (approximately mainline Station 210+00) of the original Project proposal, as approved in the EIR/EIR.
- 3. Traffic operations (e.g., sight distance) would be improved.
- 4. The Safety Review Committee concurred with this restriping modification.

### Comments/Explanation/Details

(continued)

Attach additional sheets as necessary; include narrative reason why POAQC or Not POAQC decision is appropriate